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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/816,718	04/02/2004	Georg Wittmann	12406-062001	1015

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EXAMINER

LE, THAO X

ART UNIT	PAPER NUMBER
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2814

MAIL DATE	DELIVERY MODE
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11/09/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/816,718	Applicant(s) WITTMANN ET AL.	
	Examiner Thao X. Le	Art Unit 2814	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 17-36 is/are pending in the application.
- 4a) Of the above claim(s) 1-9 and 31-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-30, 35 and 36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5/27/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/11/07 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 17-30, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6897474 to Brown et al. in view of US 6867254 to Wiercinski et al.

Regarding claim 17, Brown discloses an organic electronic device that has one or more components in fig. 6 that are sensitive to moisture or oxidizing agents, comprising: a flexible substrate (115), col. 11 line 61; a functional area (116), col. 10 line 15, on the substrate (115) comprising one or more active organic elements OLED (116); a cap (120), col. 6 line 40, encapsulating the organic functional area (116); and a first flexible multilayer packaging material (110), col. 6 line 40, having a first polymeric barrier layer (111a), col. 11 line 53, and a ceramic barrier layer (112a), col. 11 line 54, wherein the first flexible multilayer packaging material (110) protects the functional area (140).

But Brown does not disclose the organic electric device wherein the first active polymer barrier comprising a polymeric matrix with anhydrides.

However, Wiercinski discloses an active polymer barrier comprising a polymer matrix with anhydride, see abstract and col. 9 lines 3-7. At the time the invention was made; it would have been obvious to one of ordinary skill in the art to incorporate the polymer matrix with anhydride teaching of Wiercinski with Brown's device, because it would have provided coating, sealant, adhesive or water stop material that can be readily prepared as taught by Wiercinski, col. 1 lines 62-65.

With respect to "active polymer that binds moisture and oxidizing agents" is only a statement of the inherent properties of the product. The structure recited

in “reference” is substantially identical to that of the claims, claimed properties or functions are presumed to be inherent. The claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a *prima facie* case of either anticipation or obviousness has been established, MPEP 2112.01.

Regarding claim 18, Brown discloses the organic electronic device according to claim 17, wherein: the first flexible multilayer packaging material (110) is arranged between the functional area (116) and the flexible substrate 115, fig. 6.

Regarding claim 19, Brown discloses the organic electronic device according to claim 17, wherein the cap 120 comprises the first flexible multilayer packaging material (121a).

Regarding claims 20, 24, Brown discloses the organic electronic device according to claim 17, wherein the cap comprises a second flexible multilayer packaging material 150 comprising: at least one ceramic barrier layer (122a); and at least one polymeric barrier layer (121a).

But Brown does not disclose the at least one active polymeric barrier layer of the second flexible multilayer packaging material includes one or more materials from the group consisting of a polymeric matrix with dispersed cyclodextrines and a polymeric matrix with anhydrides.

However, Wiercinski discloses an active polymer barrier comprising a polymer matrix with anhydride, see abstract and col. 9 lines 3-7. At the time the invention was made; it would have been obvious to one of ordinary skill in the art

to incorporate the polymer matrix with anhydride teaching of Wiercinski with Brown's device for the same reason as discussed in claim 17 above.

Regarding claims 21, 22, Brown discloses the organic electronic device according to claim 17, wherein: the cap 110 includes one or more materials from the group consisting of polymers, metals and glass, column 5 line 1, wherein: the flexible substrate 110 comprises a polymer, column 4 line 56.

Regarding claim 23, Brown discloses the organic electronic device according to claim 22, wherein: the cap 120 comprises a second flexible multilayer packaging material comprising: at least one active polymeric barrier layer 121b; and at least one ceramic barrier layer 122a.

Regarding claim 25, Brown discloses the organic electronic device according to claim 22, wherein: the flexible substrate 110 includes a second active polymeric barrier layer 121b, fig. 6.

Regarding claim 26, Brown discloses the organic electronic device according to claim 17, wherein: the flexible substrate comprises an assembly of active polymeric barrier layers 112a and ceramic barrier layers 111a.

Regarding claim 27, Brown discloses the organic electronic device according to claim 26, wherein the substrate 115 has a first surface (top) and a second surface (bottom), the first surface (top) is closer to the functional area 116 than the second surface (bottom) comprises a ceramic barrier layer 112, fig. 5.

Regarding claims 28-29, Brown disclose the organic electronic device according to claim 17, wherein the one or more active organic elements 116 comprises at least

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one stack having a first electrically conductive layer (cathode), an organic functional layer (light-emission layer) on the first conductive layer (cathode) and a second electrically conductive layer (anode) on the organic functional layer; and the organic functional layer comprises at least one organic electroluminescent layer, column 8 lines 1-19 and US 5707745 incorporated by reference.

Regarding claims 30 and 36, Wiercinski discloses the anhydrides are acid anhydrides of organic acids, col. 9 line 25, wherein the polymeric layer comprises polyester, col. 9 line 7.

5. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 6897474 to Brown et al. in view of US 6867254 to Wiercinski et al. and US 6841497 to Krell et al.

Regarding claim 35, the combination of Brown and Wiercinski disclose all limitations of claim 35, except the first and second ceramic barrier having the same composition but exhibiting different microstructure from one another.

However, Brown discloses the first and second ceramic barrier 112a-c including aluminum oxide and other, col. 12 line 42, can be same or different, see claim 19. In addition, Krell discloses an aluminum oxide of different crystal structure, col. 1 lines 9-11. At the time the invention was made; it would have been obvious to a person having ordinary skill in the art to incorporate the ceramic having different crystal structure teaching of Krell in the device of Brown in order to a ceramic barrier with different barrier properties such as chemical oxidative as well as wear resistant, col. 1 lines 16-35.

Response to Arguments

6. Applicant's arguments with respect to claims 17-30 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao X. Le whose telephone number is (571) 272-1708. The examiner can normally be reached on M-F from 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael M. Fahmy can be reached on (571) 272 -1705. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

08 Nov. 2007

/Thao X Le/
Primary Examiner, Art Unit 2814